

Advance Research Instruments Company



Integrated Micro controller Based Digital Bomb Calorimeter

Advance introduces its latest in Isothermal Bomb Calorimeter series that provides a unique Integrated Platform Design. This new Integrated Platform features all the parts and components that were earlier required to be assembled everytime an experiment was to be performed. The design of the Combustion Bomb has also been improved by adopting a unique Schrader Valve – Gas Filling Valve design. Apart from having a comparatively smaller footprint than the older designs, it maintains a higher accuracy and repeatability in GCV results. The other advanced features include a built-in display, memory, fully automatic calculations and step by step guidance to user to perform the experiment. Chiller and Computer Connectivity can be provided as an add-on feature.

The main features of the instrument include

- Latest Integrated Platform based design
- Latest ARM Microcontroller based electronics
- Easy Step-by-step experiment guidance
- Large built-in display and multifunctional keypad
- Auto Experiment Start, Auto Fire, Auto Stop functions
- Auto result calculation
- High Temperature Accuracy
- Memory to store Water Equivalent and Calorific Value results
- New Schrader Valve free design Combustion Bomb
- Five Selectable Menus available
- Printer attachment for complete experiment data
- Real Time Clock for Time and Date

Technical Specifications

Operating Principle: Isothermal

Range: 500-12000

Temperature Resolution: 0.001/0.01°C

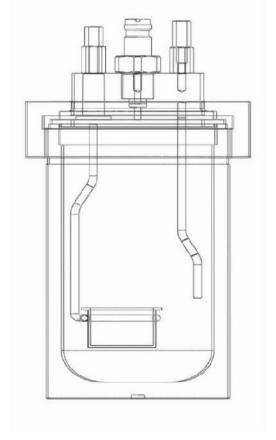
Operating Time per experiment: 10-12 minutes (Main Testing Period)

Jacket Type: Fixed, Electroplated Copper Vessel Type: Fixed, Electroplated Copper

Oxygen Filling: Automatic Assembly to fill Oxygen

Printer Connectivity: Provided Computer Connectivity: Optional

Standard Accessories



• Integrated Bomb Calorimeter complete set • New Combustion Bomb • Fine Adjustment Valve with Pressure Gauge • Safety Relief Valve • Pellet Press • Spanner for Oxygen Tube Connection • Ignition Wire • Stand for Bomb Lid • Hook for Combustion Bomb • Stainless Steel Crucible • O Ring Set • Benzoic Acid • Instruction Manual and Warranty Certificate